

ABSTRACT OF THE DISCLOSURE

First and second carrier modulators each modulate a carrier having a different frequency from each other with a baseband input signal. First and second variable wavelength optical modulators each convert the modulated signal into an optical signal having a first or second wavelength. An optical multiplexer multiplexes the optical signals, and sends a multiplexed signal to an optical transmission line. A wavelength separator individually outputs wavelength components of the multiplexed signal. First and second optical receivers each convert these wavelength components into an electrical signal. First and second filters each pass only the signal components of each different frequency. First and second burst demodulators each demodulate the modulated signal. With such a structure, a large-capacity optical communication apparatus which is capable of simultaneously using the same wavelength without requiring wavelength management in optical transmitting circuits can be achieved at a low cost.